Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for data communication in a Wireless local area network (WLAN) using a plurality of correlators and M-ary Code Keying with an associated chip period, wherein the communication utilizes a signature sequence of ~~the~~ a type generated by performing the steps of:

selecting a seed set of sequences of a given size having a plurality of inner sequences;

generating a plurality of cosets from the seed set of sequences by multiplying in turn each inner sequence by an element of an associated sequence;

constructing a subset of sequences by concatenating the sequences of a coset; and

constructing a full set of sequences by concatenating subsets of sequences, for simultaneously generating:

a periodic signal for acquiring symbol synchronization; and

a difference squarewave signal for acquiring and maintaining chip synchronization, a chip synchronization signal being generated by subtracting a sum of even groups of correlator outputs from a sum of odd groups of correlator outputs.

2. (Previously presented) A method as claimed in claim 1 in which the utilization of the signature sequence further generates a sum signal for determining received signal strength and setting threshold levels.

3. (Previously presented) A method as claimed in claim 1 in which the sum of the responses of all correlators to the repetitive periodic transmission of one code is a constant.

4. (Previously presented) A method as claimed in claim 1 in which the difference signal is a periodic bipolar squarewave signal.

5. (Original) A method as claimed in claim 4 in which the periodic bipolar squarewave signal has a period of twice the chip period.

6. (Previously presented) A method as claimed in claim 1 including the step of generating a periodic transmission for producing a zero value sidelobe of a summed correlation.

7. (Original) A method as claimed in claim 6 in which summation of the correlators is initiated in response to the periodic transmission.

8. (Original) A method as claimed in claim 7 in which the correlator summation is directed to a thresholding circuit.

9. (Previously presented) A method as claimed in claim 7 in which the correlator summation is directed to a comparison logic for level determination.

10. (Previously presented) A method as claimed in claim 1 in which an early-late detector circuit is connected at the correlator outputs.

11. (Previously presented) A method as claimed in claim 10 incorporating means for window-thresholding a chip synchronization waveform.

12. (Currently Amended) A data communications apparatus for use in a Wireless local area network (WLAN) incorporating a plurality of correlators and being formed for M-ary Code Keying at an associated chip period, wherein the apparatus is formed for communication with a signature sequence of ~~the~~ a type generated by:

means for selecting a seed set of sequences of a given size having a plurality of inner sequences;

means for generating a plurality of cosets from the seed set of sequences by multiplying in turn each inner sequence by an element of an associated sequence;

means for constructing a subset of sequences by concatenating the sequences of a coset;

means for constructing a full set of sequences by concatenating subsets of sequences;

means for generating a period signal for acquiring symbol synchronization; and

means for generating a difference squarewave signal for acquiring and maintaining chip synchronization and for generating a chip synchronization signal by subtracting a sum of even groups of correlator outputs from a sum of odd groups of correlator outputs.

13. (Original) An apparatus as claimed in claim 12 incorporating means for generating a sum signal for determining received signal strength and setting threshold levels.

14. (Previously presented) An apparatus as claimed in claim 12 in which the sum of the responses of all correlators to the repetitive periodic transmission of one code is a constant.

15. (Previously presented) An apparatus as claimed in claim 12 in which the difference signal is a periodic bipolar squarewave signal.

16. (Original) An apparatus as claimed in claim 15 in which the periodic bipolar squarewave signal has a period of twice the chip period.

17. (Previously presented) An apparatus as claimed in claim 12 incorporating periodic transmission means for producing a zero value sidelobe of a summed correlation.

18. (Original) An apparatus as claimed in claim 17 in which summation of the correlators is initiated in response to the periodic transmission.

19. (Original) An apparatus as claimed in claim 18 in which the correlator summation is directed to a thresholding circuit.

20. (Previously presented) An apparatus as claimed in claim 18 in which the correlator summation is directed to a comparison logic for level determination.

21. (Previously presented) An apparatus as claimed in claim 12 in which an early-late detector circuit is connected at the correlator outputs.

22. (Previously presented) An apparatus as claimed in claim 21 incorporating means for window-thresholding a chip synchronization waveform.